

CONTENTS - *Continued*

PHYSICAL REVIEW B

THIRD SERIES, VOLUME 84, NUMBER 14

OCTOBER 2011-1(II)

Physical and magnetic properties of $\text{Ba}(\text{Fe}_{1-x}\text{Mn}_x)_2\text{As}_2$ single crystals (<i>10 pages</i>)	144528
A. Thaler, H. Hodovanets, M. S. Torikachvili, S. Ran, A. Kracher, W. Straszheim, J. Q. Yan, E. Mun, and P. C. Canfield	
Superconducting properties of perforated NbN films using ordered arrays of ferromagnetic nanowires (<i>9 pages</i>)	144529
X. Hallet, S. Adam, L. Piraux, J. Vanacken, and V. V. Moshchalkov	

	Superconductor-insulator-ferromagnet-superconductor Josephson junction: From the dirty to the clean limit (<i>13 pages</i>)	144513
	N. G. Pugach, M. Yu. Kupriyanov, E. Goldobin, R. Kleiner, and D. Koelle	
	Spin fluctuations and unconventional pairing in KFe_2As_2 (<i>8 pages</i>)	144514
	Katsuhiro Suzuki, Hidetomo Usui, and Kazuhiko Kuroki	
	High-temperature superconductivity in atomic metallic hydrogen (<i>8 pages</i>)	144515
	Jeffrey M. McMahon and David M. Ceperley	
	Tunable coupling between three qubits as a building block for a superconducting quantum computer (<i>7 pages</i>) . . .	144516
	Peter Groszkowski, Austin G. Fowler, Felix Motzoi, and Frank K. Wilhelm	
	$s_{\pm}$ -like spin resonance in the iron-based nodal superconductor $\text{BaFe}_2(\text{As}_{0.65}\text{P}_{0.35})_2$ observed using inelastic neutron scattering (<i>5 pages</i>)	144517
	Motoyuki Ishikado, Yuki Nagai, Katsuaki Kodama, Ryoichi Kajimoto, Mitsutaka Nakamura, Yasuhiro Inamura, Shuichi Wakimoto, Hiroki Nakamura, Masahiko Machida, Katsuhiro Suzuki, Hidetomo Usui, Kazuhiko Kuroki, Akira Iyo, Hiroshi Eisaki, Masatoshi Arai, and Shin-ichi Shamoto	
	Neutron inelastic scattering peak by dissipationless mechanism in the s_{++} -wave state in iron-based superconductors (<i>9 pages</i>)	144518
	Seiichiro Onari and Hiroshi Kontani	
	Interaction of Josephson and magnetic oscillations in Josephson tunnel junctions with a ferromagnetic layer (<i>12 pages</i>)	144519
	S. Mai, E. Kandelaki, A. F. Volkov, and K. B. Efetov	
	Anisotropic magnetism, superconductivity, and the phase diagram of $\text{Rb}_{1-x}\text{Fe}_{2-y}\text{Se}_2$ (<i>11 pages</i>)	144520
	V. Tsurkan, J. Deisenhofer, A. Günther, H.-A. Krug von Nidda, S. Widmann, and A. Loidl	
	Mixed state of $\text{La}_{1.83}\text{Sr}_{0.17}\text{CuO}_4$ studied by means of muon-spin rotation and magnetization experiments in a low magnetic field (<i>9 pages</i>)	144521
	B. M. Wojek, S. Weyeneth, S. Bosma, E. Pomjakushina, and R. Puźniak	
	Majorana fermions in semiconductor nanowires (<i>29 pages</i>)	144522
	Tudor D. Stanescu, Roman M. Lutchyn, and S. Das Sarma	
	Pair breaking versus symmetry breaking: Origin of the Raman modes in superconducting cuprates (<i>13 pages</i>) . . .	144523
	N. Munnikes, B. Muschler, F. Venturini, L. Tassini, W. Prestel, Shimpei Ono, Yoichi Ando, D. C. Peets, W. N. Hardy, Ruixing Liang, D. A. Bonn, A. Damascelli, H. Eisaki, M. Greven, A. Erb, and R. Hackl	
	Effect of nodes, ellipticity, and impurities on the spin resonance in iron-based superconductors (<i>12 pages</i>)	144524
	S. Maiti, J. Knolle, I. Eremin, and A.V. Chubukov	
	Effect of pairing fluctuations on low-energy electronic spectra in cuprate superconductors (<i>12 pages</i>)	144525
	Sumilan Banerjee, T. V. Ramakrishnan, and Chandan Dasgupta	
	Topological superconducting phases in disordered quantum wires with strong spin-orbit coupling (<i>6 pages</i>)	144526
	Piet W. Brouwer, Mathias Duckheim, Alessandro Romito, and Felix von Oppen	
	Observing the origin of superconductivity in quantum critical metals (<i>15 pages</i>)	144527
	J.-H. She, B. J. Overbosch, Y.-W. Sun, Y. Liu, K. E. Schalm, J. A. Mydosh, and J. Zaanen	

(Continued)

Cubic and noncubic multiple- q states in the Heisenberg antiferromagnet on the pyrochlore lattice (<i>15 pages</i>)	144432
Tsuyoshi Okubo, Trung Hai Nguyen, and Hikaru Kawamura	
Experimental confirmation of quantum oscillations of magnetic anisotropy in Co/Cu(001) (<i>5 pages</i>)	144433
U. Bauer, M. Dąbrowski, M. Przybylski, and J. Kirschner	
Parametric oscillator based on nonlinear vortex dynamics in low-resistance magnetic tunnel junctions (<i>5 pages</i>)	144434
S. Y. Martin, N. de Mestier, C. Thirion, C. Hoarau, Y. Conraux, C. Baraduc, and B. Diény	
Debye-Hückel theory for spin ice at low temperature (<i>14 pages</i>)	144435
C. Castelnovo, R. Moessner, and S. L. Sondhi	
Superfluidity and superconductivity	
<i>Ab initio</i> electronic and geometrical structures of tripotassium-intercalated phenanthrene (<i>4 pages</i>)	144501
P. L. de Andres, A. Guijarro, and J. A. Vergés	
Mean-field analysis of intra-unit-cell order in the Emery model of the CuO ₂ plane (<i>10 pages</i>)	144502
Mark H. Fischer and Eun-Ah Kim	
Valency and spin states of substituent cations in Bi _{2.15} Sr _{1.85} CaCu ₂ O _{8+δ} (<i>10 pages</i>)	144503
T. M. Benseman, J. R. Cooper, C. L. Zentile, L. Lemberger, and G. Balakrishnan	
Vortex matter in mesoscopic two-gap superconductor square (<i>7 pages</i>)	144504
Paulo J. Pereira, Liviu F. Chibotaru, and Victor V. Moshchalkov	
Brownian refrigeration by hybrid tunnel junctions (<i>14 pages</i>)	144505
J. T. Peltonen, M. Helle, A. V. Timofeev, P. Solinas, F. W. J. Hekking, and J. P. Pekola	
Anisotropic magnetic order of the Eu sublattice in single crystals of EuFe _{2-x} Co _x As ₂ ($x = 0, 0.2$) studied by means of magnetization and magnetic torque (<i>11 pages</i>)	144506
Z. Guguchia, S. Bosma, S. Weyeneth, A. Shengelaya, R. Puzniak, Z. Bukowski, J. Karpinski, and H. Keller	
Vortex lines in topological insulator-superconductor heterostructures (<i>9 pages</i>)	144507
Ching-Kai Chiu, Matthew J. Gilbert, and Taylor L. Hughes	
Majorana states and longitudinal NMR absorption in a ³ He- <i>B</i> film (<i>4 pages</i>)	144508
M. A. Silaev	
Number conserving theory for topologically protected degeneracy in one-dimensional fermions (<i>11 pages</i>)	144509
Jay D. Sau, B. I. Halperin, K. Flensberg, and S. Das Sarma	
Specifics of impurity effects in ferropnictide superconductors (<i>9 pages</i>)	144510
Y. G. Pogorelov, M. C. Santos, and V. M. Loktev	
Rectification of vortex motion in a circular ratchet channel (<i>12 pages</i>)	144511
N. S. Lin, T. W. Heitmann, K. Yu, B. L. T. Plourde, and V. R. Misko	
Mass flow through solid ⁴ He induced by the fountain effect (<i>17 pages</i>)	144512
M. W. Ray and R. B. Hallock	

(Continued)

Role of Tracy-Widom distribution in finite-size fluctuations of the critical temperature of the Sherrington-Kirkpatrick spin glass (9 pages)	144417
Michele Castellana and Elia Zarinelli	
Coercivity enhancement in FePt nanowires due to the suppression of available paths for domain wall propagation (6 pages)	144418
J. P. Attané, D. Ravelosona, A. Marty, V. D. Nguyen, and L. Vila	
Electronic and magnetic properties of the different phases of Ti_4O_7 from density functional theory (4 pages)	144419
Mariana Weissmann and Ruben Weht	
Valence bond entanglement and fluctuations in random singlet phases (7 pages)	144420
Huan Tran and N. E. Bonesteel	
Long-lived magnons throughout the Brillouin zone of the strong-leg spin ladder $(\text{C}_7\text{H}_{10}\text{N})_2\text{CuBr}_4$ (4 pages)	144421
D. Schmidiger, S. Mühlbauer, S. N. Gvasaliya, T. Yankova, and A. Zheludev	
Distinct magnetism in ultrathin epitaxial NiFe_2O_4 films on MgAl_2O_4 and SrTiO_3 single crystalline substrates (7 pages)	144422
Michael Foerster, José Manuel Rebled, Sònia Estradé, Florencio Sánchez, Francesca Peiró, and Josep Fontcuberta	
Defect formation preempts dynamical symmetry breaking in closed quantum systems (6 pages)	144423
Carmine Ortix, Jorrit Rijnbeek, and Jeroen van den Brink	
Mechanisms of nonlinear spin-wave emission from a microwave-driven nanocontact (5 pages)	144424
Florin Ciubotaru, Alexander A. Serga, Britta Leven, Burkard Hillebrands, and Luis Lopez-Diaz	
Effect of intraband Coulomb repulsion on the excitonic spin-density wave (7 pages)	144425
Björn Zocher, Carsten Timm, and P. M. R. Brydon	
Low-frequency and resonance magnetoelectric effects in piezoelectric and functionally stepped ferromagnetic layered composites (6 pages)	144426
G. Sreenivasulu, S. K. Mandal, S. Bandekar, V. M. Petrov, and G. Srinivasan	
Intrinsic anomalous Hall effect in nickel: A GGA + U study (6 pages)	144427
Huei-Ru Fuh and Guang-Yu Guo	
First-principles study of magnetic exchange force microscopy with ferromagnetic and antiferromagnetic tips (11 pages)	144428
Cesar Lazo and Stefan Heinze	
Unusual ferromagnetic superexchange in CdVO_3 : The role of Cd (10 pages)	144429
Alexander A. Tsirlin, Oleg Janson, and Helge Rosner	
Morphology influence on nanoscale magnetism of Co nanoparticles: Experimental and theoretical aspects of exchange bias (10 pages)	144430
K. Simeonidis, C. Martinez-Boubeta, O. Iglesias, A. Cabot, M. Angelakeris, S. Mourdikoudis, I. Tsiaoussis, A. Delimitis, C. Dendrinou-Samara, and O. Kalogirou	
<i>Ab initio</i> study of the magnetic ordering in Si/Mn digital alloys (11 pages)	144431
M. M. Otrokov, A. Ernst, V. V. Tugushev, S. Ostanin, P. Buczek, L. M. Sandratskii, G. Fischer, W. Hergert, I. Mertig, V. M. Kuznetsov, and E. V. Chulkov	

(Continued)

Lifetime of gap discrete breathers in diatomic crystals at thermal equilibrium (<i>8 pages</i>)	144304
Liya Z. Khadeeva and Sergey V. Dmitriev	
Magnetism	
Neutron scattering study of magnetic phase separation in nanocrystalline $\text{La}_{5/8}\text{Ca}_{3/8}\text{MnO}_3$ (<i>6 pages</i>)	144401
Chetan Dhital, Clarina de la Cruz, C. Opeil, A. Treat, K. F. Wang, J.-M. Liu, Z. F. Ren, and Stephen D. Wilson	
Modulation and correlation lengths in systems with competing interactions (<i>15 pages</i>)	144402
Saurish Chakrabarty and Zohar Nussinov	
$J_1 - J_2$ Heisenberg model at and close to its $z = 4$ quantum critical point (<i>8 pages</i>)	144403
J. Sirker, V. Y. Krivnov, D. V. Dmitriev, A. Herzog, O. Janson, S. Nishimoto, S.-L. Drechsler, and J. Richter	
Low-temperature evolution of the modulated magnetic structure in the ferroelectric antiferromagnet BiFeO_3 (<i>5 pages</i>)	144404
I. Sosnowska and R. Przeniosło	
Localized domain-wall excitations in patterned magnetic dots probed by broadband ferromagnetic resonance (<i>5 pages</i>)	144406
F. G. Aliev, A. A. Awad, D. Dieleman, A. Lara, V. Metlushko, and K. Y. Guslienko	
Melting of a frustration-induced dimer crystal and incommensurability in the J_1 - J_2 two-leg ladder (<i>12 pages</i>)	144407
Arthur Lavarélo, Guillaume Roux, and Nicolas Laflorencie	
Magnetic properties of oxide glasses containing iron and rare-earth ions (<i>8 pages</i>)	144408
Hirofumi Akamatsu, Jun Kawabata, Koji Fujita, Shunsuke Murai, and Katsuhisa Tanaka	
☞ Theory of spin-phonon coupling in multiferroic manganese perovskites RMnO_3 (<i>14 pages</i>)	144409
Masahito Mochizuki, Nobuo Furukawa, and Naoto Nagaosa	
Long-range interlayer-coupled magnetization reversal mediated by the antiferromagnetic layer in Py/FeMn/CoFe trilayers (<i>7 pages</i>)	144410
Ki-Yeon Kim, Ji-Wan Kim, Hyeok-Cheol Choi, A. Teichert, Chun-Yeol You, Sungkyun Park, Sung-Chul Shin, and Jeong-Soo Lee	
Tunable anisotropic magnetism in trapped two-component Bose gases (<i>10 pages</i>)	144411
Yongqiang Li, M. Reza Bakhtiari, Liang He, and Walter Hofstetter	
Fast coherent relaxation in a ferromagnet nanoparticle assembly (<i>7 pages</i>)	144412
V. Henner, Yu. Raikher, and P. Kharebov	
Element-specific magnetic moments and spin-resolved density of states in CoFeMnZ ($Z = \text{Al, Ga, Si, Ge}$) (<i>7 pages</i>)	144413
P. Klaer, B. Balke, V. Alijani, J. Winterlik, G. H. Fecher, C. Felser, and H. J. Elmers	
Ultrafast magnetization dynamics rates within the Landau-Lifshitz-Bloch model (<i>10 pages</i>)	144414
U. Atxitia and O. Chubykalo-Fesenko	
Magnetic and structural phase transitions in erbium at low temperatures and high pressures (<i>5 pages</i>)	144415
Sarah A. Thomas, Georgiy M. Tsoi, Lowell E. Wenger, Yogesh K. Vohra, and Samuel T. Weir	
Low-moment magnetism in the double perovskites Ba_2MOsO_6 ($M = \text{Li, Na}$) (<i>4 pages</i>)	144416
Andrew J. Steele, Peter J. Baker, Tom Lancaster, Francis L. Pratt, Isabel Franke, Saman Ghannadzadeh, Paul A. Goddard, William Hayes, D. Prabhakaran, and Stephen J. Blundell	

(Continued)

Helium atom scattering from $\text{KTa}_{0.7}\text{Nb}_{0.3}\text{O}_3$ (001): Anomalous surface reflectivity with varying surface temperature and helium wave vector (8 pages)	144114
Rifat Fatema, T. W. Trelenberg, David H. Van Winkle, J. G. Skofronick, S. A. Safron, F. A. Flaherty, and L. A. Boatner	
Effect of strain on the stabilization of oxygen-enriched nanoclusters in Fe-based alloys (5 pages)	144115
H. Zhao, C. L. Fu, M. Krcmar, and M. K. Miller	
Ground state of $(\text{Pb}_{0.94}\text{Sr}_{0.06})(\text{Zr}_{0.530}\text{Ti}_{0.470})\text{O}_3$ in the morphotropic phase boundary region: Evidence for a monoclinic <i>Cc</i> space group (11 pages)	144116
Ravindra Singh Solanki, Akhilesh Kumar Singh, S. K. Mishra, Shane J. Kennedy, Takashi Suzuki, Yoshihiro Kuroiwa, Chikako Moriyoshi, and Dhananjai Pandey	
First-principles density functional theory study of native point defects in Bi_2Te_3 (9 pages)	144117
Adham Hashibon and Christian Elsässer	
Synergetic effects of dual-beam implantation on the microstructural development in silicon (16 pages)	144118
F. Fortuna, V. A. Borodin, M.-O. Ruault, E. Oliviero, and M. A. Kirk	
Theory of the reentrant quantum rotational phase transition in high-pressure HD (9 pages)	144119
Yanier Crespo, Alessandro Laio, Giuseppe E. Santoro, and Erio Tosatti	
Mobility in gated $\text{GaN}_x\text{As}_{1-x}$ heterostructures as a probe of nitrogen-related electronic states (19 pages)	144120
J. Buckeridge and S. Fahy	
First-principles study on the interaction of H interstitials with grain boundaries in α - and γ -Fe (13 pages)	144121
Yaojun A. Du, Lars Ismer, Jutta Rogal, Tilmann Hickel, Jörg Neugebauer, and Ralf Drautz	
High-fidelity direct coherent diffractive imaging of condensed matter (6 pages)	144122
A. J. Morgan, A. J. D'Alfonso, A. V. Martin, A. I. Bishop, H. M. Quiney, and L. J. Allen	
Inhomogeneous, disordered, and partially ordered systems	
 Integrable modification of the critical Chalker-Coddington network model (20 pages)	144201
Yacine Ikhlef, Paul Fendley, and John Cardy	
Critical behavior of the random-field Ising magnet with long-range correlated disorder (9 pages)	144202
Björn Ahrens and Alexander K. Hartmann	
Noncollinear magnetism at interfaces in iron-chromium alloys: The ground states and finite-temperature configurations (13 pages)	144203
M. Yu. Lavrentiev, R. Soulaïrol, Chu-Chun Fu, D. Nguyen-Manh, and S. L. Dudarev	
Dynamics, dynamical systems, lattice effects:	
Detecting and characterizing frequency fluctuations of vibrational modes (7 pages)	144301
Z. A. Maizelis, M. L. Roukes, and M. I. Dykman	
Heat transport and thermal rectification in molecular junctions: A minimal model approach (5 pages)	144302
E. Díaz, R. Gutierrez, and G. Cuniberti	
Prediction of high-frequency intrinsic localized modes in Ni and Nb (8 pages)	144303
M. Haas, V. Hizhnyakov, A. Shelkan, M. Klopov, and A. J. Sievers	

(Continued)

ARTICLES

Structure, structural phase transitions, mechanical properties, defects

Lattice normal modes and electronic properties of the correlated metal LaNiO_3 (<i>13 pages</i>)	144101
Gaoyang Gou, Ilya Grinberg, Andrew M. Rappe, and James M. Rondinelli	
Metastable state of the photomagnetic Prussian blue analog $\text{K}_{0.3}\text{Co}[\text{Fe}(\text{CN})_6]_{0.77} \cdot 3.6\text{H}_2\text{O}$ investigated by various techniques (<i>12 pages</i>)	144102
Christian Chong, Miho Itoi, Kamel Boukheddaden, Epiphane Codjovi, Aurelian Rotaru, François Varret, Franz A. Frye, Daniel R. Talham, Isabelle Maurin, Dmitry Chernyshov, and Miguel Castro	
Compression behavior of densified SiO_2 glass (<i>6 pages</i>)	144103
Daisuke Wakabayashi, Nobumasa Funamori, Tomoko Sato, and Takashi Taniguchi	
Insulator-metal transition of highly compressed carbon disulfide (<i>6 pages</i>)	144104
Ranga P. Dias, Choong-Shik Yoo, Minseob Kim, and John S. Tse	
Equation of state for the low-pressure crystalline phase of SnI_4 (<i>9 pages</i>)	144105
Kazuhiro Fuchizaki and Nozomu Hamaya	
Pressure-induced transformation in Na_4C_{60} polymer: X-ray diffraction and Raman scattering experiments (<i>9 pages</i>)	144106
Mingguang Yao, Vittoria Pischedda, Bertil Sundqvist, Thomas Wågberg, Mohamed Mezouar, Regis Debord, and Alfonso San Miguel	
Pressure-induced two-step spin transition with structural symmetry breaking: X-ray diffraction, magnetic, and Raman studies (<i>9 pages</i>)	144107
Helena J. Shepherd, Sylvestre Bonnet, Philippe Guionneau, Salma Bedoui, Gaston Garbarino, William Nicolazzi, Azzedine Bousseksou, and Gábor Molnár	
Influence of the stacking fault energy surface on partial dislocations in fcc metals with a three-dimensional phase field dislocations dynamics model (<i>10 pages</i>)	144108
A. Hunter, I. J. Beyerlein, T. C. Germann, and M. Koslowski	
Imaging of highly inhomogeneous strain field in nanocrystals using x-ray Bragg ptychography: A numerical study (<i>11 pages</i>)	144109
P. Godard, M. Allain, and V. Chamard	
Competing order parameters in the $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$ solid solution at high pressure (<i>11 pages</i>)	144110
Guillaume Frayssé, Ali Al-Zein, Julien Haines, Jérôme Rouquette, Véronique Bornand, Philippe Papet, Christine Bogicevic, and Steve Hull	
Structural evolution of one-dimensional spin-ladder compounds $\text{Sr}_{14-x}\text{Ca}_x\text{Cu}_{24}\text{O}_{41}$ with Ca doping and related evidence of hole redistribution (<i>14 pages</i>)	144111
Guochu Deng, Vladimir Pomjakushin, Václav Petříček, Ekaterina Pomjakushina, Michel Kenzelmann, and Kazimierz Conder	
Missing-atom structure of diamond $\Sigma 5$ (001) twist grain boundary (<i>4 pages</i>)	144112
Peter Steneteg, Valeriu Chirita, Natalia Dubrovinskaia, Leonid Dubrovinsky, and Igor A. Abrikosov	
Twinning hierarchy, shape memory, and superelasticity demonstrated by molecular dynamics (<i>7 pages</i>)	144113
M. Zelazny, R. Richardson, and G. J. Ackland	

(Continued)

Directional short range order in $L1_0$ FeMnPt magnetic thin films (5 pages)	140408(R)
Cheng-Jun Sun, Dongbin Xu, Steve M. Heald, Jingsheng Chen, and Gan-Moog Chow	
Effects of cation-size variance on spin and orbital orders in $\text{Eu}_{1-x}(\text{La}_{0.254}\text{Y}_{0.746})_x\text{VO}_3$ (4 pages)	140409(R)
R. Fukuta, S. Miyasaka, K. Hemmi, S. Tajima, D. Kawana, K. Ikeuchi, Y. Yamasaki, A. Nakao, H. Nakao, Y. Murakami, and K. Iwasa	
Frequency dependence of spin relaxation in periodic systems (4 pages)	140410(R)
I. Barsukov, F. M. Römer, R. Meckenstock, K. Lenz, J. Lindner, S. Hemken to Krax, A. Banholzer, M. Körner, J. Grebing, J. Fassbender, and M. Farle	
 Density-functional study of paramagnetic iron (5 pages)	140411(R)
Hualei Zhang, Börje Johansson, and Levente Vitos	
Superfluidity and superconductivity	
Scheme to measure Majorana fermion lifetimes using a quantum dot (4 pages)	140501(R)
Martin Leijnse and Karsten Flensberg	
Jump in specific heat in the presence of a spin-density wave at the superconducting transition in iron pnictides (4 pages)	140502(R)
M. G. Vavilov, A. V. Chubukov, and A. B. Vorontsov	
Varying Eu^{2+} magnetic order by chemical pressure in $\text{EuFe}_2(\text{As}_{1-x}\text{P}_x)_2$ (4 pages)	140503(R)
S. Zapf, D. Wu, L. Bogani, H. S. Jeevan, P. Gegenwart, and M. Dressel	
Doping- and irradiation-controlled pinning of vortices in $\text{BaFe}_2(\text{As}_{1-x}\text{P}_x)_2$ single crystals (4 pages)	140504(R)
L. Fang, Y. Jia, J. A. Schlueter, A. Kayani, Z. L. Xiao, H. Claus, U. Welp, A. E. Koshelev, G. W. Crabtree, and W.-K. Kwok	
Extended Hubbard model of superconductivity driven by charge fluctuations in iron pnictides (5 pages)	140505(R)
Sen Zhou, G. Kotliar, and Ziqiang Wang	
Magnetic state of $\text{K}_{0.8}\text{Fe}_{1.6}\text{Se}_2$ from a five-orbital Hubbard model in the Hartree-Fock approximation (4 pages)	140506(R)
Qinlong Luo, Andrew Nicholson, José Riera, Dao-Xin Yao, Adriana Moreo, and Elbio Dagotto	
Quantum criticality near the upper critical field of Ce_2PdIn_8 (4 pages)	140507(R)
Y. Tokiwa, P. Gegenwart, D. Gnida, and D. Kaczorowski	
Recovering the superconducting state via spin accumulation above the pair-breaking magnetic field of superconductor/ferromagnet multilayers (4 pages)	140508(R)
I. V. Bobkova and A. M. Bobkov	
Conductivity in pseudogapped superconductors: A sum-rule-consistent preformed-pair scenario (4 pages)	140509(R)
Dan Wulin, Benjamin M. Fregoso, Hao Guo, Chih-Chun Chien, and K. Levin	
Non-Gaussian self-dynamics of liquid hydrogen (5 pages)	140510(R)
Milva Celli, Ubaldo Bafile, Daniele Colognesi, Alessio De Francesco, Ferdinando Formisano, Eleonora Guarini, Martin Neumann, and Marco Zoppi	

(Continued)

RAPID COMMUNICATIONS

Structure, structural phase transitions, mechanical properties, defects

- ☞ Stability of spontaneous polarization in ultrathin improper ferroelectrics (*4 pages*) 140101(R)
Zhigao Sheng, Naoki Ogawa, Yasushi Ogimoto, and Kenjiro Miyano
- ☞ Strain glassy behavior and premartensitic transition in Au₇Cu₅Al₄ alloy (*5 pages*) 140102(R)
Jiayi Liu, Mingjiang Jin, Chang Ni, Yao Shen, Genlian Fan, Zi Wang, Yafei Zhang, Caifu Li,
Zhiquan Liu, and Xuejun Jin
- Coherent solid/liquid interface with stress relaxation in a phase-field approach to the melting/solidification transition (*4 pages*) 140103(R)
Valery I. Levitas and Kamran Samani
- Dense close-packed phase of tin above 157 GPa observed experimentally via angle-dispersive x-ray diffraction (*4 pages*) 140104(R)
Ashkan Salamat, Gaston Garbarino, Agnès Dewaele, Pierre Bouvier, Sylvain Petitgirard, Chris J. Pickard,
Paul F. McMillan, and Mohamed Mezouar

Magnetism

- Altering magnetostrictive strain pathways via morphology of spontaneously aligned domains (*4 pages*) 140401(R)
Yongmei M. Jin and Harsh Deep Chopra
- Lack of evidence for a singlet crystal-field ground state in the magnetic pyrochlore Tb₂Ti₂O₇ (*5 pages*) 140402(R)
B. D. Gaulin, J. S. Gardner, P. A. McClarty, and M. J. P. Gingras
- Ferroelectric charge order stabilized by antiferromagnetism in multiferroic LuFe₂O₄ (*5 pages*) 140403(R)
A. M. Mulders, M. Bartkowiak, J. R. Hester, E. Pomjakushina, and K. Conder
- Non-Abelian statistics and a hierarchy of fractional spin liquids in spin-*S* antiferromagnets (*4 pages*) 140404(R)
Burkhard Scharfenberger, Ronny Thomale, and Martin Greiter
- Dispersion of collective magnonic modes in stacks of nanoscale magnetic elements (*5 pages*) 140405(R)
M. Dvornik and V. V. Kruglyak
- Resonant photoelectron diffraction with circularly polarized light (*4 pages*) 140406(R)
Martin Morscher, Frithjof Nolting, Thomas Brugger, and Thomas Greber
- Intermediate Haldane phase in spin-2 quantum chains with uniaxial anisotropy (*4 pages*) 140407(R)
Hong-Hao Tu and Román Orús

